

# **ABSTRACT**

A device and method for defining a signal transmission path having a selectable, continuous impedance. In one embodiment of the invention, a circuit board is provided with a signal conductor, and a conductive plane having an opening, wherein dimensions of the opening and proximity of the opening to the signal conductor are selected to affect an impedance of the signal conductor. The signal conductor and the conductive plane form a transmission path with the impedance of the transmission path being a function in part of the opening and the signal conductor. Such a circuit board provides a signal-transmission path having a selectable, continuous impedance return-signal path.